



MEMORANDUM FOR:

C/NIC

I VERY MUCH BELIEVE THE  
 AREA ON SOV. REACTIONS TO US STRATEGIC PROG.  
 SHOULD BE SENT  
 INFORMALLY, AS WE HAVE OTHER  
 PAPERS. I ASSUME LARRY'S  
 NORMAL ADDRESSES WOULD INCLUDE  
 RICHARD PERCE & ANDY MARSHALL.  
 I WOULD SUGGEST, IN ADDITION,  
 STEVE BOSWORTH C/SP; DON  
 FORTIER, PM/INSC; DON GREGG, OVP.  
 (+ HUGH MONTGOMERY & GEN WILLIAMS  
 Date *William*

FORM 101 USE PREVIOUS EDITIONS  
5-75

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## THE DIRECTOR OF CENTRAL INTELLIGENCE

WASHINGTON, D.C. 20505

National Intelligence Council

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SP - 88/83  
31 May 1983  
Copy 3MEMORANDUM FOR: Chairman, National Intelligence Council  
Vice Chairmen, National Intelligence Council

FROM: National Intelligence Officer for Strategic Programs

SUBJECT: Do the Soviets React to US Strategic Programs?

1. The action-reaction character of US and Soviet military developments has been a long standing debate. At the level of grand strategy it is clear that Western concepts of containment and military developments have been in large part reactions to Soviet expansionist objectives. It is also clear that the Soviets' strategy and military developments are in large part intended to break what they have perceived as Western encirclement. Also, strategic defenses of either side are obviously reactions to the other's perceived offensive capabilities.

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2. It is much less clear, however, whether the development by one side of new types of offensive weapons, such as ballistic missiles, MIRVs or long range cruise missiles has been directly responsible for the development of similar weapons by the other. Differences in historical influences, geopolitical positions and nuclear war strategy have resulted in major asymmetries in the wartime missions envisioned by the US and USSR for their various strategic force elements and in offensive force requirements. It is debatable whether either side has developed and deployed similar types of weapons to any significant extent merely because the other side was doing so, or whether both sides have simply exploited specific advances in technology to acquire weapons that enhanced their ability to perform strategic missions. I believe the Soviets watch our efforts carefully and put into development, or keep in development, those which we favor. This is in addition to their ongoing efforts which are only in general terms related to our own. In any case, Soviet propaganda has intensified in seeking to exploit the perceptions of Western publics that there is an action-reaction phenomenon in the US-USSR arms competition. The Soviets are claiming that every US program to develop and deploy new strategic offensive weapons makes a Soviet program to develop a similar system necessary, hence the US continues to be the instigator of the

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arms race. In fact, they do have a counterpart to every US program except possibly the Stealth bomber, while in addition having many others, unpublicized. The Soviets are aided in promoting this view by the intense secrecy surrounding their weapons programs.

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3. The view that the Soviets respond to US actions has been the cause of much controversy: it has sometimes been used indiscriminately as a shorthand to indicate that Soviet developments are purposeful, intended to be responsive to enemy capabilities, rather than being mindless or just the result of the momentum of bureaucratic inertia. This view has engendered the untenable opposing view that the Soviets never respond, but march entirely to their own drummer. In fact, the Soviets sometimes do respond, and in various ways. Recognition of this should not lead to a conclusion that the US fuels the arms race, nor that the Soviets are incapable of acting on their own.

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4. There has been a clear change in Soviet rhetoric; for the purposes of both bragging and coercion they are being very specific in pointing out how they match us, program for program, and in claiming they can compete as an equal in weapons technology. There is an important trend that may be emerging, although the evidence is still inconclusive. To the extent they are growing to depend on systems with technology intended to be comparable to our own, and I believe they are, they seem to be facing potentially serious problems in being able to produce reliable advanced systems to meet production norms, and in being able to operate and maintain such systems in the field.

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5. The attached paper, written by [redacted] and reviewed by various analysts in the DDI, examines these Soviet claims in light of the evidence we have on Soviet weapon development. If we could do so without compromising intelligence sources, some points in [redacted] paper might be used to counter Soviet propaganda claiming that the USSR is merely reacting to US initiatives.

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6. I believe this paper should be sent to the DCI and to some key consumers, as a special NIC paper that is somewhat speculative and provocative. I would appreciate your comments on the paper, and suggestions for its distribution.

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*Lawrence K. Gershwin*

Lawrence K. Gershwin

Attachment

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31 May 1983

ACTION-REACTION AND SOVIET STRATEGIC PROGRAMS

"The crux of the matter is that the USSR has on no occasion initiated the development of new types of weapons, and [has] produced them only as a response to their appearance in the United States."

How to Avert the  
Threat to Europe  
Moscow 1983

A persistent Soviet claim over the years has been that the US initiates the arms race while the Soviets reluctantly respond. In the past they supported that claim by listing generic categories of weapons (e.g. nuclear weapons, intercontinental bombers, MIRVs, etc.) that the US had first and that they later acquired. A relatively new twist has been added to the Soviet message: they are now buttressing their claims by ticking off specific Soviet weapons, such as the SS-X-24, the TYPHOON, and the cruise missile, developed in response to specific US weapons. They are also threatening that they will continue to copy our weapons. According to Defense Minister Ustinov, "The economy, science and technology of the Soviet Union have attained such a level that they can guarantee the creation of any kind of weapon that our enemies wish to gamble on." The probable Military Industrial Commission (VPK) representative to START, Osadchiyev, takes the claim a bit further. He has stated that unlike in the past, Soviet programs will not lag behind US ones by five to seven years; instead they will be simultaneous.

It is difficult to refute Soviet claims about the nature of the arms race in a public forum since information on their weapons plans and programs--which are conceived, decided upon, and developed in total secrecy in the USSR--is also considered classified in this country. Because US programs often reach public awareness years before Soviet programs, major US weapons appear to predate similar Soviet systems. When seen from the perspective of intelligence data on their strategic program effort, the answer is more complicated. The purpose of this memo is to briefly describe action/reaction from that perspective. It does not address the host of other military and political considerations, such as defenses, force restructuring and C<sup>3</sup> improvements, that a more complete discussion of action-reaction would require. Three different types of interrelated "reactions" will be briefly considered: budgetary responses to Western weapons programs; military-technical competition; and specific weapons program responses of like systems.

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Budgetary "Responses"

[redacted] the Soviets use selected information on Western arms budgets to validate their five-year defense plans:

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--The Soviet arms budget for the 1976-80 period was defended by the Minister of Defense, probably to the Defense Council or Politburo, using a presentation showing the increased arms budgets for the major Western countries plus information on selected weapons programs in those countries.

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--[redacted] he had been directed to make important alterations in the plan to counteract increases in the US budget. According to [redacted] the military was demanding--and getting--"system-by-system" improvements to match US programs.

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It would be misleading to infer from the above evidence that the Soviet arms budgets are only reacting to our own. They have their own goals and programs which cannot be explained as reactions. The data does indicate, however, that Soviet decisionmakers must feel a necessity to be shown that their arms budget is reacting to a threat, rather than marching to its own drummer.

Military-Technical Competition

The military R&D sector is charged with monitoring and responding to advances in Western military technologies. The Soviets, aware of most US weapon programs and technologies at a very early R&D stage, are imbued with a strong sense of technical competition in developing comparable systems. This competition is supported by both a doctrine which argues for the necessity of "military-technical superiority" over the West, and a committed leadership. In a speech not long before his death, Brezhnev said, "Competition in military technology has sharply intensified, often acquiring a fundamentally new character. A lag in this competition is inadmissible."

There is a requirement that every major civilian or military project be compared with the best foreign technology before it is approved to proceed. Once in development, state standards mandate the comparison of the characteristics of hardware, at different design stages, with similar Western hardware. [redacted] competition with the US is a primary aspect in the development of Soviet missile technologies:

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--A "priority factor" in the development of Soviet missiles is competition with US missiles, in terms of their characteristics.

--Each generation of missile has to "keep pace" with foreign achievements.

--By the beginning of the 1960s, Soviet missile designers were assigned the "most important national task" of developing missiles superior to US missiles in terms of their basic characteristics.

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These are not empty statements. Soviet missile designers, [redacted] measure the characteristics of their existing and future missiles against US systems. For example, they have SLBMs under development that have a specific requirement to be superior to the TRIDENT I (C-4) and II (D-5) missiles in range/throw weight characteristics. Defense Minister Ustinov has claimed publicly that their new ICBM, the SS-X-24, will not be inferior "in any way" to the MX. Despite such claims, the Soviets cannot, and do not, realistically expect to match the US in weapons technologies across the board. For example, in the late 1970s, [redacted] a Soviet missile designer acknowledged that they were lagging behind the West in terms of the size-weight characteristics of warhead materials and guidance systems.

With their access to many details of US weapons, and a relative lack of competition within the Soviet R&D community, Soviet designers are, in effect, competing with US weapon designers. US system characteristics are used as a yardstick against which Soviet technical capabilities are judged.

### Weapon Program Response

The Soviets, with their responsive, centrally planned R&D network, and their open access to many details of our future weapons, often program counterpart weapon systems to be developed and appear at about the time our systems appear. They also claim as responses similar systems that were already underway when US programs were authorized. The result is a Soviet "counterpart" to every major strategic weapon system that the US has in a publicized development or deployment program (with the possible exception of the Stealth bomber):

<u>US System</u>	<u>IOC Advantage</u>	<u>Soviet "Counterpart"</u>
MX	→	SS-X-24*
Pershing II	←	KY-14 ?
C-4/Ohio	←	SS-N-20/Typhoon*
D-5	→	SS-N-20 Follow-on*
ALCM	←	AS-X-15
GLCM	→	SSC-X-4 } *
SLCM	→	SS-NX-21 }
B-1	←	Blackjack A*
Stealth Bomber	←	?
Modified B-52 for ALCM	←	New BEAR variant for ALCM

Of the Soviet "counterpart" systems, the Typhoon, the Blackjack, and the cruise missiles probably began development after similar US systems. They could probably thus be categorized as "responses". However, they are also logical weapons systems that the Soviet military can justify as needing, and

\*Claimed by the Soviets as a response.

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which would more likely survive critical review internally because the US was pursuing such a development. The SS-X-24 and SS-N-20 follow-on missiles were decided upon, began development, and will be deployed prior to the MX and D-5 missiles that they are "responding" to.

The Soviets probably are setting up as an option the claim that they have a missile equivalent to the Pershing II. This March, Central Committee member Zagladin stated that if the P-II is deployed, the Soviets would have to deploy missiles equivalent to the P-II; they have also implied it would be a ballistic missile a lot like Pershing II. The KY-14 missile, a modified version of the SS-20 with a new reentry vehicle, and apparently carrying only one RV, has been tested [redacted] It is apparently the result of an unusually high priority pre-flight development program [redacted]

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[redacted] The apparent objective was to quickly reach flight testing, so that it could be available to support a Soviet claim, when needed sometime this year, of their response to P-II.

In the USSR, the very existence of programs to develop weapon systems, not to mention their technical and operational details, are state secrets. Secrecy allows them a number of advantages, including the ability to control when and how to play the US action-Soviet reaction story to fit their political needs. For example, the Soviets have had programs underway since the early 1970s to develop long range land attack cruise missiles. The fact of their existence was not made public until late 1982, when they were well into flight testing. By delaying the announcement until then, the Soviets were able to sharpen their "reaction" claim and also give the impression of being a technological "sleeping bear" that, when aroused, can quickly develop any system the US has. They will similarly control information concerning future plans for the cruise missiles until (and unless) their limited initial deployments can be played for maximum political advantage in the INF arena. Also, systems which are not necessarily equal in capability to US systems will be played as if they are.

Curiously, with the exception of the BLACKJACK, TYPHOON/SS-N-20 and its follow-on, the Soviets have not publicized the existence of their counterpart systems--and hence the offer of a bargaining chip--until both nations' systems are in the full scale development phase. This could reflect the normal secrecy of Soviet programs. It could also reflect a certain reluctance by the Soviet military to offer to give up a new system, even if it could lead to halting an important US program.

#### Other Soviet Systems

In addition to the systems listed above, the Soviets have at least 10 other new or modernized missiles in development for initial testing in the 1980s which (a) they don't talk about and (b) which cannot be claimed as a copy of a US system.

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<u>Soviet Systems Without A US "Counterpart"</u>	<u>Estimated Availability For First Test</u>
PL-5 ICBM	Feb 1983
Improved SS-18*	1983?
Improved SS-19*	1983?
Improved Small Solid ICBM*	1983?
Small Solid (Range Unknown)	1984-86
Improved SS-20	1984
SS-18 Class	1987
Large GLCM	Dec 1981
Large SLCM	Dec 1981
Improved SS-N-18 (I)	1983
Improved SS-N-18 (II)	1987
Improved SS-N-20 with MaRV	1987-90

The PL-5 missile currently in testing will probably be initially deployed in 1985 in silos, in 1986 in a mobile mode. It is the latest in a long line of Soviet land-mobile ICBM programs, dating back to the early 1960s. The smaller US Midgetman is now being developed for possible deployment in the early 1990s.

The Soviets have been trying to stop the deployment of the US MX, D-5 and cruise missiles, and now Pershing II, in part by threatening to deploy their counterpart systems. It is evident that even if the Soviets succeed in halting the US programs by not deploying their similar systems (which would have a great appeal to those who believe the arms race would then be stopped), they would still have a large number of other ICBM, IRBM, SLBM and LRCM improvements underway. It is also evident that they will continue to speak about only their "counterpart" systems developed in "reaction", and not about the rest of their strategic program development efforts.

Their SLBM development effort is a case in point. They have four programs underway: a MIRVed SS-N-20 follow-on to be deployed in 1988, an SS-N-20 follow-on with some sort of terminal guidance, and two liquid propellant missiles to be deployed in 1985 and 1989 aboard D-class SSBNs. The Soviets would be happy to scrap the SS-N-20 follow-ons for non-development of the D-5, and retain their programs for liquids.

if the D-5 is not deployed; they will have at least 17 SSBNs that can carry them. Since they cannot be touted as a "response" to US programs, and public knowledge about them would hurt their effort to stop D-5, the Soviets are not anxious to go public with them.

\*Current program status uncertain.

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### Soviet Rationale for Reactive Weapons

In addition to the bargaining chip value of developing some systems which are similar to ours, the Soviets probably have other motivations, including:

1. Propaganda value. The US can be accused--using selective examples--as being the initiator of the arms race. They can also portray themselves as being the technological equal of the US.
2. Their leaders have historically had a technological inferiority complex. Counterpart programs are probably easier to get authorized than indigenous developments.
3. They are paranoid about US potential for technological breakthrough and probably routinely work on anything the US is interested in.
4. The Soviets claim to have "military-technical superiority" as a goal. It is easy to measure qualitative progress against a similar system, especially if you know the technical requirements the other side is working to fulfill.
5. They probably believe that they can save time, money and uncertainty by having the US make the appropriate design and technology choices, especially if they can then obtain information through technology transfer.

### Implications

- The Soviets apparently feel that every US strategic weapon system must have a Soviet counterpart. Ustinov's claim about their intention and capability to respond should not be taken lightly. Some future systems will probably be true reactions. Others, fortuitously in development in support of normal Soviet military requirements, will be claimed as reactions. Historical precedent and programs now underway strongly suggest that actual mirror-image programs will be a significant part of their development effort, but by no means the dominant part.
- In order to have weapons appear at the same time as US weapons, the Soviets have to begin their programs at about the same time--there are no appreciable differences in weapons development times between the two countries. The apparent requirement for quick responses to US programs may mean that the Soviets could be susceptible to deceptive efforts that indicate that we are succeeding in developing advanced technological concepts or weapons systems, and could be vulnerable to US cost-imposing strategies.
- If the Soviets offer up an analogous program to halt a US deployment, be wary. They probably have under wraps another system which can perform a similar mission.

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- The Soviets rely upon the West for some weapons systems ideas and choices, and upon Western technology to sustain those systems (as well as those systems indigenously conceived). The longer a lid can be kept on the existence of a new US program and its technical requirements, and the tighter the security around it, the more distant and technologically inferior the Soviet counterpart will be.
- The Soviet R&D base has probably become more capable in developing high technology weapon systems than the production sector has become in producing them. If the Soviets believe their own propaganda about their technological capabilities and plan to produce Western-style weapon systems in Soviet-style quantities, they could have serious problems. [REDACTED] the Chief of the General Staff is seriously concerned that Soviet industries lack the capability to produce highly sophisticated weapon systems. There is some evidence that he may have cause for concern. The Soviets are apparently focusing their technology acquisition effort on production technologies. Also, many of the more recent Soviet programs, including the Typhoon, the SS-N-18, the SA-10 and the Backfire C have encountered production-related problems. Their traditional requirement to have force levels equivalent to the combination of all potential adversaries, which they have been able to fulfill, in the past led them to make large scale producibility a key restraining factor in the technology incorporated in their systems. They have a commitment today to have systems which are the technical equal of the West, appearing at the same time as Western systems. These two factors, quantity and quality, may be sufficiently incompatible that the defense industry is becoming stressed as today's high technology systems reach the production stage.

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